1. A flip chip semiconductor die, comprising:

a plurality of exterior bond pads formed on said die; and

a plurality of solder bumps deposited on said bond pads, wherein each said solder bump is less than about 100 microns in diameter.

2. The semiconductor die of claim 1, wherein said solder bumps are about 10 microns or less in diameter.

3. The semiconductor die of claim 1, wherein at least some of said solder bumps are spaced by a pitch of less than about 100 microns.

4. The semiconductor die of claim 3, wherein said pitch is about 10 microns or less.

5. The semiconductor die of claim 1, wherein said solder bumps are attached to each said bond pad with an adhesive metal.

6. A semiconductor device, comprising:

a substrate;

a die having a metallurgy layer positioned over said substrate;

an oxide layer deposited over said metallurgy layer; and

a plurality of connection sites coupled to said metallurgy layer through said oxide layer, wherein a solder bump deposited on each said connection site is less than about 100 microns in diameter.

7. The packaged semiconductor device of claim 6, wherein said solder bumps are about 10 microns or less in diameter.

8. The packaged semiconductor device of claim 6, wherein at least some of said solder bumps are spaced by a pitch of less than about 100 microns.

9. The packaged semiconductor device of claim 8, wherein said pitch is about 10 microns or less.

10. The packaged semiconductor device of claim 6, wherein said solder bumps are attached to each said connection sites with an adhesive metal.

11. A system for depositing solder on a plurality of connection sites located on semiconductor dies, said system comprising:

a movable substrate adapted to move at least one semiconductor die in a first plane;

a movable drive including at least one print head, said movable drive adapted to move said print head in a second plane, said print head adapted to deposit on the semiconductor die a material having a diameter of less than about 100 microns; and

a controller for controlling the movements of said movable drive and said movable substrate.

12. The system of claim 11, wherein said movable substrate is adapted to move back and forth in said first plane.

13. The system of claim 11, wherein said movable drive is adapted to move said print head back and forth in said second plane.

14. The system of claim 11, wherein said movable drive is a rotatable shaft.

15. The system of claim 14, wherein at least four print heads are mounted on said rotatable shaft.

16. The system of claim 15, wherein at least two of said print heads deposit the same material.

17. The system of claim 16, wherein each said print head deposits a different material.

18. The system of claim 17, wherein a first of said print heads deposits a pre-cleaning solution.

19. The system of claim 18, wherein a second of said print heads deposits an adhesive metal.

20. The system of claim 19, wherein a third of said print heads deposits a solder material.

21. The system of claim 20, wherein said solder material contains lead.

22. The system of claim 20, wherein said solder material is lead-free.

23. The system of claim 20, wherein a fourth of said print heads deposits a passivation material.

24. The system of claim 11, wherein said print head deposits a solder material on said semiconductor die in multiple connection sites, each said connection site being spaced by a pitch of less than about 100 microns.

25. The system of claim 24, wherein each said connection site is spaced by a pitch of about 10 microns or less.

26. The system of claim 11, wherein said print head deposits a solder material on said semiconductor die on at least one connection site, said deposited solder material having a diameter of less than about 100 microns.

27. The system of claim 26, wherein said deposited solder material has a diameter of about 10 microns or less.

28. A print head for ejecting a solder material, comprising:

a chamber including a metallic compound which generates a gas when heated;

a reservoir including the solder material;

a channel in communication with said chamber and said reservoir;

an ejection port in communication with said channel, wherein a pressure increase due to the generation of the gas in said chamber causes said solder material to be ejected from said ejection port, said print head being configured to eject said solder material from said ejection port in such a way as to create a

deposition of said solder material that has a diameter of less than about 100 microns.

29. The print head of claim 28, wherein said print head is configured to eject said solder material in such a way as to create a deposition of said solder material that has a diameter of about 10 microns or less.

30. The print head of claim 28, wherein said print head includes multiple ejection ports, each said ejection port so located as to eject said solder material in such a way as to deposit said solder material in a plurality of locations spaced by a pitch of less than about 100 microns.

31. The print head of claim 30, wherein each said locations are spaced by a pitch of about 10 microns or less.

32. The print head of claim 28, wherein said metallic compound is a metallic hydride.

33. The print head of claim 32, wherein said metallic hydride comprises titanium hydride.

34. The print head of claim 28, further comprising a laser, wherein said laser heats said metallic compound to generate said gas.

35. A method of fabricating a flip chip semiconductor die, comprising depositing a solder material on each of a plurality of connection sites, wherein the diameter of each said deposited solder material is less than about 100 microns.

36. The method of claim 35, wherein said deposition of solder material is accomplished with a single print head.

37. The method of claim 35, wherein said deposition comprises:

depositing a first element from a print head; and

depositing at least a second element from a print head, wherein the combination of the elements forms the solder material.

38. The method of claim 35, wherein said deposition comprises depositing the solder material from two or more print heads.

39. The method of claim 35, wherein said deposition is accomplished with a plurality of print heads.

40. The method of claim 35, further comprising pre-cleaning the bond pads prior to said deposition of the solder material.

41. The method of claim 40, further comprising depositing an adhesive metal between said pre-cleaning and said depositing of the solder material.

42. The method of claim 41, further comprising adding a passivation material onto the deposited solder material.

43. The method of claim 35, wherein said deposition comprises depositing the solder material multiple times at a single location.